

Name: _____

at1124exam: Radicals and Squares (v826)

Question 1

Simplify the radical expressions.

$$\sqrt{50}$$

$$\sqrt{12}$$

$$\sqrt{99}$$

Question 2

Find all solutions to the equation below:

$$\frac{(x - 5)^2}{3} + 10 = 37$$

Question 3

By completing the square, find both solutions to the given equation. *You must show work for full credit!*

$$x^2 - 6x = 7$$

Question 4

A quadratic polynomial function is shown below in standard form.

$$y = 3x^2 + 24x + 39$$

Express the function in **vertex form** and identify the **location** of the vertex.